



UNDERGROUND CONDUIT— Water users of the Lake Creek Irrigation Co. are reaping the benefits of having their canal buried be-

neath the surface of the ground where the problems which plagued the system have been reduced to almost nil.

Irrigation System - a Progress Reflection

Located in the red sandstone foothills 4 miles east of the beautiful Heber Valley is the Lake Creek Canal. A little over eleven years ago as you traveled the dirt road leading to the head of Lake Creek and to Heber Mountain you could see a widely cut chasm, a short distance adjacent, in mother earth. In a stream lined with cottonwood trees and carrying in peak periods nearly 40 cubic feet of water per second on a steep 6 percent slope, it is hardly any wonder that loss of water and erosion had caused these agricultural producers so much grief and concern.

At that juncture, in about 1957, an open concrete ditch was constructed in a move aimed to alleviate the situation at hand. A new line was cut for this ditch running parallel to and along the road for several hundred feet. This project worked well for a few years, but maintenance costs mounted heavily. In the winter months the ground underneath the line would freeze and cause tremendous upheaval, and then in the spring high water would flood over the top of the ditch. A combination of these factors

5,760 acre-feet which represented a very significant 28 percent loss by seepage and other means.

MONEY TO DO A PROJECT of this size and scope was now the hurdle blocking the development and consummation of the proposal. A request was made to the State Division of Water Resources for a loan to finance the cost of the project. The loan was approved, but only half of the battle was won because it did not cover the full amount needed.

It was at this time that the irrigation group registered a request for cost-sharing with the local ASC County Committee, who have the responsibility of administering the Federal Agricultural Conservation Program in the county. At an expected cost of \$52,000 for approximately 1½ miles of pipeline the amount of this request, \$26,250, was just too great for the County Committee to bear alone, so the State ASC Committee were considerate enough to supplement their funds. Even then the approved Federal cost-share did not approach a full 50 per cent of the cost. As a result of State participation and the approval of the Federal

tenance on the pipe will be nil and flood water cannot harm it.

These producers had asked for much more than the \$11,250 Federal ACP cost-share that they received, but were extremely grateful for what they did get. In the words one of the directors put it, "We could not have had the system that we have today if it were not for the Federal incentive payment we received, and for the free loan granted to us by the Water Resource Board."

MOST IMPORTANT IN THE aspect of this project has been the determined effort of those in the company to unite in this effort of bettering their land through the implementation of this system. The difficulties and problems they encountered seemed insurmountable at times but patience and perseverance paid off. When their children or grandchildren who follow them on the land are fully aware of the sacrifice their forefathers made for them and what was accomplished they will be most grateful.

Today a dream has become a reality for these gainful people. As they reminisce back eleven

caused cracking in the lining. Finally, even though a concerted maintenance effort was made, sections of the lining were literally floated right out of the channel. Besides this, water moving at an estimated clip of 20 miles per hour in a three-foot wide ditch represented somewhat of a safety hazard. One producer even lost some sheep in the fast-moving current.

IT WAS APPARENT NOW that some other, longer lasting solution had to come. This water was the lifeblood of these farm people who were trying to meet the demands of making a living, while some were supporting LDS church missionaries and servicemen abroad. The irrigated land served by this system of about 2,800 acres support 44 families who live on their farms or reside in Heber City and operate their farms outside the city limits.

Preliminary estimates by engineers of the Soil Conservation Service and planning meetings of stockholders began in the spring of 1967. This group of farmers have three small reservoirs, along with eight others individually owned, in the upper reaches of the Lake Creek Drainage area that are used to supplement late summer supply. It was estimated that 8,000 acre-feet of water could be delivered to the farms below if this canal system was put in underground pipe. At that time the water supply was only

cost-share program by this group this project received recognition in Washington, D. C. as a special practice.

CONSTRUCTION OF THE pipeline had to be turned over to experienced experts who had the proper equipment and manpower to do the work. So, the job was let for bid to interested firms. Fourteen hundred and seventy feet of 24-inch diameter pipe was put in during the early summer of 1967 and over 6,800 feet, with outlet structures throughout, in the early summer of 1968. The 28 percent of water that has been restored by this project represents 2,240 more acre-ft. of water for producers to use. It means that production of crops consisting mostly of alfalfa and pasture will be increased measurably. Individual income can be expected to increase by about \$10 per acre through the increased production.

THE WATER IS NOW underground where it speed quietly to its destination 4 miles below. The hazard of an open line is gone and groups who own land along where the canal traverses could develop recreation areas without danger to animal or human life. As one travels along that same road in Lake Creek today only smooth terrain over which the the canal flows underground can be seen. The project can be expected to have a life span of over 20 years, making personal investment pay off in great dividends. Main-

started and up to what has led to the present irrigation system it is truly a reflection of progress.